

Amendments to the Specification:

[0010] An emerging way of building a music collection on the user's PC is the purchase and down load of songs in a suitable compressed format across the internet. The major providers of downloadable songs include PressPlay, AOL MusicNet, FullAudio MusicNow, and MusicMatch. Users use the PC to locate, purchase and download new songs over the internet. A major limitation of this approach is that the user must be able to identify the artist, album and song by name. Disadvantages include that the user must manually locate each song within the catalog of songs in the ~~providers~~ provider's database, by typically either reading through an alphabetical list of songs by musical category (genre), artist, album or alternatively by performing a search for each song via a search tool. ~~The~~ They may have to navigate a separate set of web pages to locate and download the composition. In some cases, a web page may provide a short sample of a song which may be heard before purchasing and downloading the full song. The user may have to wait while the download is occurring, in order to verify it downloaded correctly. An additional disadvantage is that the additional cost of the PC may exceed the cost of the user's playback device. In addition, the user must learn to use the PC and its software. The user must manage the downloaded composition once it's been downloaded. The user may have to manually create playlists and later relocate the user created playlists by the playlist name.

[0011] Some ~~user's~~ users have built a portion of their collection via music piracy and file sharing software, often using peer-to-peer networks across the internet. The user faces ethical and legal issues. The user faces additional security and privacy issues associated with the peer-to-peer networks and the associated software such as viruses, worms, spyware, and stealth software. In addition, the quality of each music file is unknown and not guaranteed, since there are multiple good, marginal, bad and bogus versions of each song out on the network. The user must expend effort to locate the artist, album and song. Then, after waiting for the download to complete, the user must determine if the quality of the downloaded song is acceptable, and begin the process again if the quality is insufficient. The quality of the pirated song may be well below the quality of the original version.

[0013] Several new types of music players, including portable players, have emerged that are capable of handling compressed storage formats. The user's collection and playlists for these devices are typically managed via interactive windows software on the user's PC. For players with limited storage capacity (e.g., SonicBlue Rio MP3 player), PC software is used to select a limited portion of the ~~users~~ user's collection, which is then sent to the player's memory over a cable or loaded onto memory media or a memory device which the user can ~~inserted~~ insert into the portable player. Some recent players (such as Apple's iPod, Creative's Nomad Jukebox Zen, or PhatNoise's PhatBox) have large enough hard disc storage (10 to 30 Gbyte) to hold a collection of up to 2000 to 8000 songs. Some players (e.g., the Apple iPod) auto-synchronize with the PC by plugging into a high rate interface cable. The PhatBox player, intended for installation in automobiles has a removable hard disk cartridge, that attaches to a PC cradle (USB 2.0 cable) for content management. The user's collection and the creation of user playlists are managed on the PC via interactive windows based software.

[0015] Other interactive internet based streaming services allow the user to create a custom playlist or multiple playlists of favorites, by selecting each song to include from a catalog of compositions provided by the service. A major limitation is that the user must be familiar enough with the composition to be able to identify the artist, album and song by name. In addition, the user must expend considerable effort to manually locate each song within the catalog of songs in the ~~providers~~ provider's database or the user's library, by typically either reading through an alphabetical list of songs by genre, artist, album or performing a search for each song by using a search tool. The user must continually and manually update all this as their musical tastes change over time. To generate a stream of songs, the user may then have to ~~chese~~ choose a group or order of particular songs to form a user's custom playlist. Another limitation[[,]] is that the user does not own the music collection and does not own listening rights to the music. In addition, it is not integrated to other listening rights the user already has purchased.

[0032] Utilize the prior experiences of other similar users, to improve each ~~users~~ user's experience.

[0054] As shown in figure 2, there may be a plurality of possible users 21 (user1, user2, ..., user"z"). Each user may operate one or more user playback devices 22 at different times and different locations. The devices a given user operates may be at many different locations, such as at home(s), work(s), automobile(s), portable(s), etc. User devices may also be incorporated into other products such as a cell phone, television or home entertainment system. The user devices may be mobile and portable. Some devices (i.e., a personal player) may be used by only a single individual user. Other devices (i.e., an automobile player) may be operated by different individuals at different times. The user devices may be manufactured by [[a]] many different vendors. Any given user device may only be able to handle a limited number of the available composition formats.

[0056] There may also be many different experience providers 26. An experience provider is responsible for providing the ~~adaptive~~ adaptive personalized entertainment sequence that is customized for each user and is integrated with the user's collection of compositions. The experience provider may automatically introduce the user to appropriate new compositions over time and automatically adopt the personalized program sequence as a user's tastes change. The experience provider automatically distributes the user's collection and also automatically collects and maintains the user's profile and history across all the user's devices. The user's collection is made available to any device the specific user is operating.

[0062] An experience provider is responsible for providing the ~~adaptive~~ adaptive personalized music (or entertainment) program that is customized for each user and is integrated with the user's collection of compositions. The experience provider may coordinate the following functions automatically without requiring any significant user action:

[0075] Although all of the above functions may be performed by the user's experience provider, ~~[[the]]~~ they may performed by separate entities that are under the coordination of the user's experience provider. It is desirable that the user have many experience providers to ~~choose~~ choose between and to be able to easily switch (with low switching costs) from one experience provider to another.

[0078] Prior to a device shutting down, all the latest user feedback and user history may be forwarded to ~~[[he]]~~ the network repository for later use by other user devices. The device's user display may optionally include an indicator, that is activated during device shutdown, to indicate whether concurrency with the repository has been completed. Optionally, the device may include~~[[a]]~~ an automatic capability of periodically trying to establish a network connection for upload in-order to complete concurrency with the repository prior to concluding shutdown.

[0097] Each user device must determine the specific user that the entertainment program will be customized for. In one embodiment, each time the device is re-started or powered-up the user may be re-determined so that multiple users may intermittently share the same device, yet experience a customized program. Voice recognition of the user's voice or a unique verbal identifier or some combination of both may be used. Other possibilities include the recognition of the user via ~~an camera~~ a camera image taken at startup, or various bio-metric sensing of the user such as fingerprint sensor on the "on" control or other device controls. The same input microphone may be used for both voice recognition and for the optional "capture" mode (discussed in a later section). The device may also keep a list of prior user's so the identification process may be defaulted or biased toward the most recent user(s). For devices that are typically used by ~~[[a]]~~ only a single user, the user identity may be configured on initial use and not reconfigured unless a reconfiguration is specifically requested by the user. It is preferred that the user identification process require minimal or no specific user actions.

[0118] By utilizing the normal user control actions as feedback on each currently playing composition, the users rating automatically ~~adopts~~ adapts to the user's evolving preferences and tastes over time without requiring special actions by the user to specifically rate compositions. A user's composition rating may be re-adjusted each time a composition is played or selected, so the rating adapts gradually and automatically. User feedback on each composition while it is playing occurs automatically based on the user's normal control actions.

[0172] The user may begin the creation of a new user channel by activating the "Create" channel control 43b. The user now has access to a plurality of "starting" channels (possibly 100's) via the channel "up" 43c and "down" 43d controls. In one embodiment, each "starting" channel [[my]] may be playing "highlights" representing a different mood or category of music. The ordering of the "highlights" channels may be based on the user's history (and the aggregate experience of similar users), so that the most likely pleasing "highlight" channels for each user, require the fewest pushes of the channel "up" 43c and "down" 43d controls. The user provides feedback about each channel by the amount of time spent at a channel. The user also provides feedback on each "highlight" while it is playing via the "forward" 42c, "back" 42f, "like" 42g and "play" 42d controls. All the feedback history is retained for use the next time the "create channel" mode is entered. Once the user has generated a threshold amount of positive feedback on a "highlight" channel, a new user channel may be automatically added to the user's channel list. Until the user has provided a second higher threshold of feedback, the new channel may tend to provide a larger number of highlights in-order to allow the user to more quickly tune the channel to the user's preferences.

[0197] The experience provider does not need to store an individual library of compositions for each user. The actual compositions may be stored in a common library that is shared by all users and accessed based upon a user profile maintained for each user. The amount of access bandwidth provided for each composition may be adjusted to match aggregate user demand. For example, a currently popular composition that is being downloaded by many users, may be made available from many servers across the network in-order to meet the demand. While a less popular composition [[many]] may be made available from significantly fewer servers on the network.

[0202] This may include the ~~establish~~ establishment of methods for confirming the user's identity at the start of future device sessions. This may include capturing sound to be used for voice recognition of the user's name or other specific words, biometrics measurements of the user such as fingerprint on the start control, or camera imaging of the user's face.